



Project Fact Sheet

New Technology Implementation at California Irrigation Districts

GOALS

- Accelerate the rate of acceptance and adoption of new water conservation technologies that have been successfully implemented by selected irrigation districts but have not been publicized.

PROJECT DESCRIPTION

Some technologies are already commercially available for improving water delivery flexibility and reliability. Irrigation districts have not widely implemented many of them because (i) they do not know about or understand the technologies, (ii) they cannot afford to implement them, or (iii) the technologies are so new that they simply have not had enough time to be implemented. For these technologies, the appropriate research involves documenting and publicizing the benefits and disadvantages of their application. Research and dissemination of information about these new existing technologies would improve their rate of successful adoption.

BENEFITS TO CALIFORNIA

Energy Efficiency Benefits:

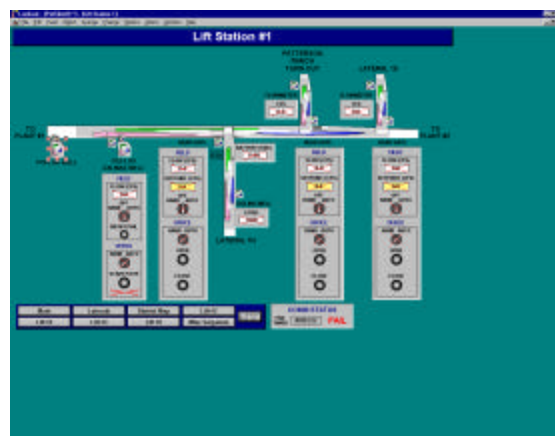
- Reduction in on-farm groundwater pumping (because surface water deliveries will be more flexible, and pumping water levels will remain at higher levels),
- Increased crop yield per unit of energy consumed,
- More efficient fertilizer practices,
- Reduced vehicular travel (due to automatic systems and remote monitoring),
- Reduced deterioration of groundwater quality and quantity, and
- Reduced pumping by the irrigation districts themselves.

FUNDING AMOUNT

California Energy Commission: \$85,000



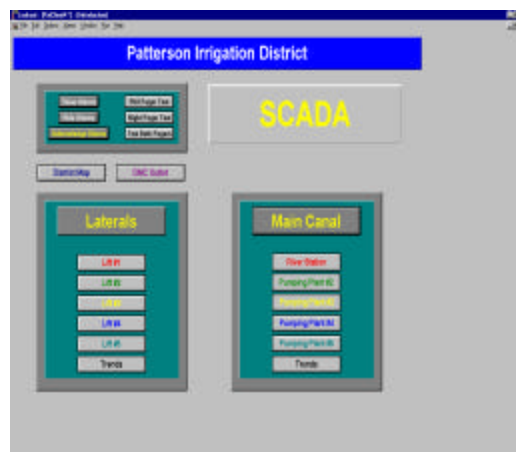
Irrigation district installation of SCADA equipment on multiple pumps



SCADA system pump control computer screen

PROJECT STATUS

- Published Infrared Technology for Preventative Maintenance fact-sheet and mailed to districts throughout California.
- VFD/SCADA Applications – Documented benefits. This is in its final stages of the report. It required a few more visits than anticipated.
- Guidelines for Guaranteeing a Proper VFD Installation on Existing Pumps.



Paterson Irrigation District SCADA System

FOR MORE INFORMATION

Ricardo Amon

California Energy Commission
1516 Ninth Street, MS-43
Sacramento, CA 95814-5504
(916) 654-4019
ramon@energy.state.ca.us

Charles M. Burt, P.E., Ph.D.

Chairman of the Board - Irrigation
Training and Research Center (ITRC)
Professor - BioResource and Agricultural
Engr. Dept. California Polytechnic State
Univ. (Cal Poly)
San Luis Obispo, CA 93407
(805) 756-2379
cburt@calpoly.edu